

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Yeok Sing Sio
Serial No. : 10/069,211 Confirmation No.: 1353

RESPONSE TO OFFICE ACTION - Remarks**Claim Rejections - 35 USC §102 (paragraph 2)**

In the Office Action mailed September 5, 2003, the Examiner has rejected claims 1, 2, 9 and 12 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,653,783 to Steup. The Examiner states that '783 teaches Applicant's claim limitations including "first" (reference 47) and "second catch member" (reference 37), and that functional recitation is interpreted as a broadly stated capability and does not define from the reference where one of ordinary skill in the art would recognize that inherent capability of the prior art structure which is inherently capable of remaining locked during at least very small flexion.

Applicant respectfully traverses this rejection. Applicant herein amends claims 1-3, 5, 9, 12, 14 and 16 to more clearly define the invention. Amended claim 1 incorporates the limitation that the first and second catch members are located in the narrow space between the first and second members and that the projections on the shaft are flexed towards each other to enhance their engagement or tighten the locking when a prying member such as a tool is inserted into the narrow space between either of the first and second members and one of its shafts to attempt to pry the first and second members to the open position. Support for this amendment can be found on page 4, lines 1-6, in Figure 1 and on page 2, lines 27-30. Claim 2 is amended to delete the phrase "capable of";

claims 3 and 5 are amended to conform with U.S. patent practice. Claims 12 and 16 are amended to delete the phrase "a plurality of"; claims 14 and 16 are amended to more clearly define the invention by changing "catches" to "catch members" throughout. No new matter has been added.

Applicant respectfully submits that '783 is a locking system. It is based on a lock and spring mechanism which uses a spring lock at its mechanism and requires insertion of some object for locking and unlocking, that is, "... the requirement that opening should be possible only by means of a tool is met ..." (column 3, lines 58-59, emphasis added). There is no mention of any "extended locking effect" when being damaged and deformed. By contrast, applicant's design is a security installation used to protect against forced intrusion, so that the insertion of a prying member such as a tool would not open the lock, instead it would strengthen the grip of the lock. Prior art such as '783 only focused on locking. Applicant is aware of no prior art which has brought up using the technique of triggering the other locks into a locked position when a first lock is damaged and deformed. Applicant's invention is also unique because the lock is being placed within narrow chinks or fissures and utilizes the gap within the invaded chinks to induce "extended locking effect" to enhance protection against external force. Applicant made use of the flexibility of the material and angles such that when there is a change to the angles, the external force will be diverted in two directions, thus causing the prying tool to slip off. Break-in is prevented by disabling the function of the intruding tool. This is a technical advancement in the utilization of material elasticity. Also, the materials have been optimized so that when the elasticity limit is reached, the tension will cause the other ordinary locks to be permanently locked. This is the ingenuity of the invention.

Applicant's amended claim 1 includes limitations not found in '783. The catch members of applicant's invention are located in the narrow space between the first and second members while

'783 does not contain such a space. Further, insertion of a tool or other prying member into applicant's device further engages the lock as opposed to opening the lock as in '783. These are specific limitations in claim 1 which are not found in '783, wherefor '783 cannot support a rejection under 35 U.S.C. 102(b). Also, claims 2, 9 and 12 depend from claim 1 and incorporate the limitations therein. Thus, applicant respectfully requests that this rejection of claims 1, 2, 9, and 12 be withdrawn.

Claim Rejections - 35 USC §102 (paragraph 4)

The Examiner has rejected claims 1, 2, 3, 6-15, 16-20 and 22 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,641,186 to Ross. The Examiner states that '186 teaches applicant's claim limitations including "first and second catch members" as reference numbers 60. The Examiner further states that regarding claims 2 and 9, capable limitations are generally broad since no particular structure is actually defined. Regarding claim 10, the Examiner states that the attachment portion of each member 60 defines a rather box-like base for the "L" shape.

Applicant respectfully traverses this rejection. US Patent 5,641,186 is a lock structure and is not designed with the intention to prevent forced prying open the object. Obvious functional, usage and technical differences exist between '186 and applicant's invention. Firstly, '186 is exposed, not used within narrow chinks. When in use, the moving mechanism is also different. There is no mention of the use of sliding, swing or drawer mechanism. The concept of "cross-gripping when being damaged and deformed" and "the stronger the damaging force, the tighter the grip" is also not present. Although US Patent 5,641,186 did mention using elastic movable materials, it did not elaborate on the requirements of elasticity and the coefficient of the angle during movement. If the elasticity is too great and the angle moved during damage is too large, the design

will lose its effectiveness. However, this shortcoming is not present in applicant's invention.

Again, applicant's amended claim 1 includes limitations not found in '186. The catch members of applicant's invention are located in the narrow space between the first and second members while '186 does not contain such a space. Further, insertion of a tool or other prying member into applicant's device further engages the lock as opposed to opening the lock as in '186. These are specific limitations in claim 1 which are not found in '186, wherefor '186 cannot support a rejection under 35 U.S.C. 102(b). Also, claims 2, 3, 6-15, 17-20 and 22 depend from claim 1 and incorporate the limitations therein, and claim 9 has been canceled. Thus, applicant respectfully requests that this rejection of claims 1, 2, 3, 6-15, 17-20 and 22 be withdrawn.

Claim Rejections - 35 USC §102 (paragraph 5)

The Examiner has rejected claims 1, 2, 6, 8, 9, 12, 14, 15, 17-21, 23 and 24 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,873,880 to Poulos. The Examiner states that '880 teaches applicant's claim limitations including "first" - including 5, and "second catch member"-including 7, and that the catch members are disclosed to be made of metal where due to their geometry, they are inherently flexible. As regards claims 21 and 23, the Examiner states that although the lid of '186 is "hinged", the edge of the door or lid inherently slides along the lip of the container as it is closed as would be recognized by one of ordinary skill in the art, so that, as used, the limitation of "sliding" is broad and does not necessarily exclude a general pivoting or rotating movement.

Applicant respectfully traverses this rejection. Applicant respectfully submits that while the handle (reference 3) of '880 appears from Fig. 2 to be flexible, the metal strip (reference 5) does not; instead, this strip is riveted to the lid, making it inflexible. Also, the design of the lock disclosed in

'880, is an exposed one. It uses a spring lock as its locking mechanism and is totally unable to protect against illegal forced opening. This locking system has no protection over chinks. Neither does it possess the property of "the stronger the damaging force, the tighter the grip". It is also not able to cause the prying tool to slip off, or to trigger locking in other ordinary locks when being damaged and deformed.

As above, applicant's amended claim 1 includes limitations not found in '880. The catch members of applicant's invention are located in the narrow space between the first and second members while '880 does not contain such a space. Further, insertion of a tool or other prying member into applicant's device further engages the lock as opposed to opening the lock as in '880. These are specific limitations in claim 1 which are not found in '880, wherefor '880 cannot support a rejection under 35 U.S.C. 102(b). Also, claims 2, 6, 8, 9, 12, 14, 15, 17-21, 23 and 24 depend from claim 1 and incorporate the limitations therein, and claim 9 has been canceled. Thus, applicant respectfully requests that this rejection of claims 1, 2, 6, 8, 9, 12, 14, 15, 17-21, 23 and 24 be withdrawn.

Claim Rejections - 35 USC §103 (paragraph 7)

The Examiner has rejected claims 4, 5 and 7 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,873,880 to Poulos. The Examiner states that although '880 does not explicitly states the Young's Modulus of the component parts, it would have been an obvious design choice for one of ordinary skill in the art at the time of the invention for form from steel which inherently has a Young's Modulus meeting the claims' limitations.

Applicant respectfully traverses this rejection. As stated above, applicant's amended claim 1 is not anticipated by '880 and thus claims 4, 5, and 7 are not anticipated by '880. Applicant

respectfully requests that the rejection of claims 4, 5, and 7 be withdrawn.


Conclusion

Applicant appreciates that the Examiner had a telephone interview with applicant's attorney, D. Peter Hochberg, on October 2, 2003 in which the Examiner kindly agreed to enter the enclosed amended claims even though the Office Action is a Final action.

No new matter has been added. The examiner is invited to telephone the undersigned if there are any matters which could be discussed to expedite the prosecution of the above-identified application.

Respectfully submitted,

By: _____


D. Peter Hochberg
Reg. No. 24,603

DPH/KRV
D. Peter Hochberg Co., L.P.A.
1940 East Sixth Street - 6th Floor
Cleveland, OH 44114-2294
(216) 771-3800